K990585

510(k) SUMMARY

PREPARED BY:

International Distributors of

Electronics for Medicine,

Inc. (IDEM)

4814 East Second St. Benicia, CA 94510

CONTACT PERSON:

Donna Ward, President

TELEPHONE:

800-947-6334

DATE ON WHICH THE SUMMARY

WAS PREPARED:

February 19, 1999

NAME OF DEVICE:

Interacoustics Automatic

Impedance Audiometer

Model AT22t

COMMON NAME:

Impedance Audiometer

PREDICATE DEVICE:

Interacoustics Automatic Impedance Audiometer

DESCRIPTION OF DEVICE:

The Interacoustics AT22t Automatic Impedance Audiometer is an electroacoustic test instrument that produces controlled levels of test tones and signals intended for use in conducting diagnostic hearing evaluations and assisting in the diagnosis of possible otologic disorders. It features tympanometry, acoustic reflex and air conduction audiometry.

Comparison of the Interacoustics Model AT22t Automatic Impedance Audiometer and the Interacoustics Automatic Impedance Audiometer.

Indication for use – Identical for both units.

Similarities and differences:

Interacoustics AT22t Automatic	Interacoustics Automatic Impedance	
Impedance Audiometer	Audiometer	
Display Description: Digital	Digital	
Available Frequencies:		
250 Hz, 500 Hz, 1kHz, 2kHz, 3kHz,		
4kHz, 6kHz, and 8kHz	Same	
Probe Tone Frequency: 226Hz ± 3%	Same	
Probe Tone Intensity: 85dB SPL ± 3dB	Same	
Pressure Range: +200 to -300daPa	Same	
Compliance Range: 0,1 to 5 ml	Same	
Transducers: TDH39 Single		
Contralateral Earphone, Probe with	Same	
Probe Tip		
Patient response unit: Handheld Push	. •	
Button Switch	Same	
Compatible Windows Software:		
IABase95 Database program, Printview	laBase Database program only	
for On-line PC Monitoring and Printing,		
IA-NOAH-IMP Module for Interfacing		
to NOAH		
Tests: Tympanometry, Acoustic Reflex		
and Air Conduction Audiometry	Same	
Calibration: Impedance: ANSI S 3.39-		
1987, IEC 1027-1991	_	
Audiometer: ISO/R 389-1991	Same	
Power: 100-120 V or 220-240V	Same	
Size and Weight: 14" x 16" x 6"; 15.5 lbs Same		

SAFETY AND EFFECTIVENESS:

The Interacoustics AT22t Automatic Impedance Audiometer is in compliance with the following performance and safety standards:

> Audiometer: ANSI 3.6- 1989 IEC 645-1-1992 Type 4 Impedance: ANSI 3.39-1987 IEC 1027-1991 Type 2

Safety: IEC 601-1-1988



MAY 17 1999

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Donna Ward President IDEM 4814 East Second Street Benicia, CA 94510

Re: K990585

Device: Interacoustics AT22t Automatic Impedance Audiometer

Dated: February 23, 1999 Received: March 1, 1999

Classification Regulation: 77 ETY Auditory Impedance Tester, 21 CFR 874.1090

77 EWO Audiometer, 21 CFR 874.1050

Regulatory Class: II

Dear Ms. Ward:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the <u>Code of Federal Regulations</u>, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4613. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsmamain.html".

Sincerely yours,

A. Ralph Rosenthal, M.D.

Director

Division of Ophthalmic Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

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510(k) Number (if known): <u>K990585</u>		
Interacoustics AT22t Automatic Impedance Audiometer Device Name:		
Indications For Use:		
test instrument that produces c	ontrolled levels of tes c hearing evaluations	and assisting in the diagnosis of
	-	
(PLEASE DO NOT WRITE BELDW T	HIS LINE - CONTINUE O	N ANOTHER PAGE IF NEEDED)
Concurrence of CDR	H, Office of Device B	Evaluation (ODE)
(Division Sign	2050	T/M/99
510(k) Number	hthalmic Devices	
Prescription Use (Per 21 CFR 801.109)	OR	Over-The-Counter Use